10030489-1

BEST AVAILABLE COPY

Claims Presented

- 1. (Original) A wafer-level package, comprising:
- a first wafer comprising a bond pad;
- an optoelectronic device on the first wafer; and
- a second wafer comprising a gasket, the second wafer being attached to the first wafer by a bond between the gasket and the bonding pad.
- 2. (Original) The package of claim 1, wherein the second wafer comprises a mirror for reflecting a light from the optoelectronic device through the first wafer.
- 3. (Original) The package of claim 1, wherein the first wafer further comprises a contact pad, the package further comprising a via contact through the second wafer connected to the contact pad.
- 4. (Original) The package of claim 1, wherein the second wafer defines a cavity for accommodating the optoelectronic device.
- 5. (Original) The package of claim 1, further comprising a bonding layer over the gasket.
- 6. (Original) The package of claim 5, wherein the bonding layer and the bonding pad comprise gold.
- 7. (Original) The package of claim 6, wherein the bond between the gasket and the bonding pad is a thermocompression bond.
- 8. (Original) The package of claim 7, further comprising a metal barrier layer between at least one of (1) the bonding layer and the gasket, and (2) the bonding pad and the first wafer.
- 9. (Original) The package of claim 8, wherein the metal barrier layer is selected from the group consisting of (a) titanium tungsten/titanium tungsten nitrogen oxide/titanium tungsten, (b) titanium/platinum, (c) chromium/platinum, (d) tungsten silicon nitride, (e)

10030489-1

titanium silicon nitride, (f) silicon dioxide/titanium, (g) silicon dioxide/chromium, and (h) silicon dioxide/titanium tungsten.

- 10. (Original) The package of claim 1, wherein the bond between the gasket and the bonding pad is selected from a group consisting of a reaction bond and a solder bond.
- 11. (Original) The package of claim 1, wherein the gasket comprises a treaded surface.
- 12. (Original) The package of claim 1, wherein the optoelectronic device is selected from the group consisting of edge-emitting laser and a vertical cavity surface-emitting laser (VCSEL).
- 13. (Original) The package of claim 1, wherein the first wafer further comprises at least one of an active circuit and a passive circuit.
- 14. (Original) The package of claim 1, wherein the first wafer further comprises an integrated lens.
- 15. (Original) The package of claim 14, wherein the integrated lens comprises a diffractive optical element.
- 16. (Original) The package of claim 1, wherein the second wafer comprises an integrated lens and the optoelectronic device emits a light through the integrated lens.
- 17. (Original) The package of claim 16, wherein the integrated lens comprises a diffractive optical element.

18-38. Cancelled

This Page is Inserted by IFW Indexing and Scanning Operations and is not part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:
☐ BLACK BORDERS
☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
FADED TEXT OR DRAWING
BLURRED OR ILLEGIBLE TEXT OR DRAWING
☐ SKEWED/SLANTED IMAGES
☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
GRAY SCALE DOCUMENTS
☐ LINES OR MARKS ON ORIGINAL DOCUMENT
☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
□ OTHER:

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.